

14

05259

SOV/140-59-5-15/25

Interpolation in the Class of Entire Functions
of Finite Order

$$(C) \quad \overline{\lim}_{k \rightarrow \infty} \frac{1}{\ln |\lambda_k|} \ln \ln \max_{i=1,2,\dots,p_k} |\gamma_{ki}| \leq \vartheta \quad (0 < \vartheta < \infty),$$

where

$$\gamma_{ki} = \left[\frac{(z - \lambda_k)^{p_k}}{F(z)} \right]_{z=\lambda_k}^{(i-1)}, \quad F(z) = \prod_{n=1}^{\infty} \left(1 - \frac{z}{\lambda_n} \right)^{p_n} e^{\left(\frac{z}{\lambda_n} + \dots + \frac{z^k}{k \lambda_n^k} \right) \cdot p_n},$$

where k is the smallest number for which $\sum_{n=1}^{\infty} p_n |\lambda_n|^{-(k+1)}$ converges.

The author mentions A.F. Leont'yev.

There are 3 references, 2 of which are Soviet, and 1 English.

ASSOCIATION: Komi pedagogicheskiy institut (Komi Pedagogical Institute)

SUBMITTED: March 13, 1958

Card 2/2

CZECHOSLOVAKIA / USSR

ALLIKMETS, L.; LAPIN, I.;

"Behavioral Effects of the Destruction of Individual Limbic Structures in Rats."

Prague, Activitas Nervosa Superior, Vol 8, No 2, June 66, pp 129-139

Abstract [Authors' English summary modified]: Changes in orienting, motor activity, emotional behavior, and conditioned avoidance reflexes after bilateral destruction of the amygdaloid complex, ventral part of septum, or of hippocampus were investigated. In a group of 32 rats after destruction of amygdaloid complex, orienting and motor activities increased, emotional depression resulted. After septal lesion (29 rats) emotional reaction and motor activity increased, reflexes were facilitated. After hippocampal lesion (34 rats) orienting activity was depressed, emotional reactions and motor activity increased. Amygdaloid system is connected to a system inhibiting orienting motor activity, septum and hippocampus inhibit affective behavior. 1 Figure, 5 Tables, 26 Western, 2 1/1 Czech, 3 Russian, 4 East German references. (Ms. rec. 8 Oct 65).

LAPIN, I.

LAPIN, I.F.

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R000928610014-0"

Multiple complications in phlegmonous tonsillitis. Vest. oto-rin.

20 no.1:100-101 Ja-F '58.

(MIRA 11:3)

1. Iz otdeleniya bolezney ukha, gorla i nosa Orlovskoy oblastnoy bol'nitsy.

(TONSILS, abscess

with multiple compl. (Rus)

LAPIN, I.F.

Cavernous hemangioma of the larynx and urinary incontinence. Vest.
otorin. 21 no.5:99 S-0 '59. (MIRA 13:1)

1. Iz otdeleniya bolezney ukha, gorla i nosa Orlovskoy oblastnoy
bolnitsy.

(LARYNX, neoplasms)
(HEMANGIOMA, case reports)
(URINATION DISORDERS)

L 04723-67 EWP(k)/EWT(d)/EWT(1)/EWT(m)/EWP(v)/EWP(t)/ETI LJP(c) WW/JD/HM
 ACC NR: AP6027439 SOURCE CODE: UR/0135/66/000/008/0001/0003
 AUTHOR: Lapin, I. L. (Engineer) 56
 ORG: Bransk Institute of Transport Machine Construction (Branskiy institut transportnogo mashinostroeniya) B
 TITLE: Determination of the temperature of a welding arc from the atomic lines of copper 27
 SOURCE: Svarochnoye proizvodstvo, no. 8, 1966, 1-3
 TOPIC TAGS: arc welding, temperature measurement, atomic spectrum
 ABSTRACT: Experimental investigations and theoretical concepts indicate that, in an open welding arc, the processes of excitation and ionization are of a thermal character and are described by the well known Boltzmann-Saha equations. On the basis of these equations, Ornstein proposed the following equation for determination of the temperature of an arc:

$$T = \frac{E_1 - E_2}{2.3k \left(\lg \frac{J_2}{J_1} + \lg \frac{A_1 g_1 v_1}{A_2 g_2 v_2} \right)} \quad (1)$$

 where J_1 and J_2 are the radiation intensities of lines with excitation
 Card 1/3 UDC: 621.791.75.01

L 04723-67

ACC NR: AP6027439

potentials at the higher levels E_1 and E_2 ; g_1 and g_2 are the statistical weights of the higher states; A_1 and A_2 are the transition probabilities; ν_1 and ν_2 are the frequencies of the radiation lines; k is the Boltzmann Constant. The present article describes the measurement of the temperature of a high amperage iron arc by the Ornstein method on the basis of the relative intensity of the atomic lines of copper 5105.54, 5153.23, and 5218.20 Å. The existence of a difference between the excitation energies of the higher levels of the copper lines being compared (2.37 eV) makes it possible to calculate the temperature of the plasma in the arc with only a slight relative error

$$\frac{\Delta T}{T} = \frac{kT}{E_2 - E_1} \cdot \frac{A_2 \frac{J_2}{J_1}}{\frac{J_2}{J_1}} \quad (2)$$

Experimental results are exhibited in a series of curves. On the basis of the experimental data the following conclusions were drawn: 1) the spectroscopic method for studying a gas discharge can be used for the study of welding arcs of average power, whose spectra are still considerably different from black body radiation; 2) with an increase in the arc current from 5 to 20 amps, the temperature of the iron arc rises rapidly from 5300 to 5900°K; 3) with a rise in the arc current

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ACC NR: AP6027439

from 20 to 100 amps, the curve for the dependence of the temperature of the iron arc on the magnitude of the arc current has a marked point of inflection, and the temperature of the arc rises comparatively slowly from 5900 to 6200°C; 4) with an increase in the arc current from 100 to 400 amps, the temperature of the arc rises very slowly in an approximately linear manner from 6200 to 6500 K, that is, on the average, 1 degree per ampere. Orig. art. has: 5 formulas, 5 figures and 1 table.

SUB CODE: 13, 20/ SUBM DATE: none/ ORIG REF: 006/ OTH REF: 001

Card

3/3

LAPIN, I.M.

LATVIA/Zooparasitology - Acarina and Insect-Vectors of
Disease Pathogens.

6-2

Abs Jour : Ref Zhur - Biol., No 5, 1958, 19625

Author : Lapin, I.M.

Inst : -

Title : Study of Parasites on Mouselike Rodents of Latvian SSR.

Orig Pub : Latvian Acad. vestis. Izv. AN Latvian SSR, 1958, No 9,
11-122

Abstract : 17 species of ticks, 2 of lice and 15 of fleas were found
on 10 species of mouselike rodents. A high rate of in-
fection by ectoparasites was found on water rats (100%),
red chipmunk (73.5%), and yellow-throated mouse (45.9%).
On red chipmunk the dominant species of ectoparasites
were the tick larvae Trombicula zachvatkini and fleas
Leptopsylla silvatica; and on the yellow-throated mouse,
ticks Laelaps agilis.

Card 1/1

LAPIN', Ilga Martynovna [Lapins, I.]; TEYTEL'BAUM, A., redl;
LEMBERGA, A., tekhn. red.

[Biology and parasites of small forest mammals of the
Latvian S.S.R.] Biologija i parazitofauna melkikh lesnykh
mlekopitaiushchikh Latviiskoi SSR. Riga, Izd-vo AN Latviiskoi
SSR, 1963. 134 p. (MIRA 16:11)
(Latvia--Parasites--Mammals)
(Latvia--Forest fauna)

LAPIN, I. P.

"The Effect of the Exclusion of Pulmonary Respiration on a Frog Heart Upon Exotic Suppression of Conjugated Phosphorylation," a report presented at the 577th meeting of the Pharmacology and Toxicology Section, Leningrad Society of Physiologists, Biochemists and Pharmacologists im. I. M. Sechenov, ~~9 June~~ 1954, Farm. i Toks., Ju-Aug. 1955, pp. 60-63. 21 Oct

Chair of Pharmacology, Leningrad State Pediatric Medical Inst.

Sum. 900, 26 Apr 56

LAPIN, I.P.

SO: "Recent Soviet Research in Physiology, Biochemistry and Pharmacology" pub in Review of Eastern Medical Sciences, pub in Munich, Germany, Jan-March 1956 Uncl.

The Pharmacology & Toxicology Section of the Leningrad I.M. Sechenov Society of Physiologists, Biochemists and Pharmacologists held its 577th Meeting on Oct 21, 1954.

I.P. LAPIN (Chair of Pharmacology of the Leningrad State Pediatric Med Inst) discussed the effect of extinction of pulmonary respiration on the frog heart during toxic suppression of phosphorylation. When phosphorylation was prevented by administration of dinitrophenol, frogs were less resistant to hypoxia. Hypoxia was caused by peripheral (curarization) or central (urethane narcosis) paralysis of respiratory movements.

LAPIN I. P.

(The effect on the heart of a frog of arresting pulmonary respiration accompanied by toxic suppression of pulmonary phosphorylation. I. P. Lapin (Pediat. Med. Inst., Leningrad). *Bull. Eksp. Biol. i Med.* 41, No. 3, 51-5 (1958); cf. *C.A.* 28, 218¹, 5137¹.—The administration of curare (I), urethan (II), or 2,4-dinitrophenol (III) in doses sufficient to arrest respiration does not appreciably decelerate cardiac contractions of frogs. When either I or II is administered together with III, there occurs a progressive reduction of cardiac contractions and the cessation of diastolic action. In the spring cardiac arrest is achieved much quicker than in the fall, and is frequently accompanied by rigor mortis, which never occurs in the fall. In suppression of pulmonary phosphorylation cardiac arrest is 4 times more rapid by the combined administration of II and III than by I and III.

D. M. Chern

LAPIN, I. P., Candidate Med Sci (diss) -- "The effect of chemical agents which upset combined phosphorylation on the basic heart functions of the frog". Leningrad, 1959. 20 pp (Leningrad Pediatric Med Inst), 250 copies (KL, No 24, 1959, 150)

LAPIN, I.P.

Age factor in the resistance in frogs to associated hypoxia and toxic depression of respiratory phosphorylation. Biul. eksp. biol. med. 47 no.2:88-92 F '59. (MIRA 12:4)

1. Iz kafedry farmakologii (zav. - chlen-korrespondent AMN SSSR prof. V. M. Karasik) Leningradskogo pediatricheskogo meditsinskogo instituta. Predstavlena deystvitel'nyy chlenom AMN SSSR V.V. Parinyam.

(NITROPHENOLS,

2,4-dinitrophenol, with anoxia, age factor in resist. in frogs (Rus))

(ANOXIA, exper.

with 2,4-dinitrophenol intoxication, age factor in resist. in frogs (Rus))

LAPIN, I.P.

Electrocardiographic picture of the action of 2,4-dinitrophenol
on the frog heart. Biul. eksp. i biol. med. 50 no. 8:97-100
Ag '60. (MIRA 13:10)

1. Iz kafedry farmakologii (zav. - chlen-korrespondent AMN
SSSR prof. V.M. Karasik) Leningradskogo pediatricheskogo
meditsinskogo instituta. Predstavlena deystv. chlenom AMN
SSSR V.V. Parinym.

(PHENOL—PHYSIOLOGICAL EFFECT) (ELECTROCARDIOGRAPHY)

LAPIN, I.P.; GRANDE, N.V.

Increase in the rhodanese activity under the influence of dimercapto-
propanesulphonate sodium (unithiol). Farm. i toks. 24 no.5:604-610
S-0 '61. (MIRA 14:10)

1. Kafedra farmakologii (zav. - deystvitel'nyy chlen AMN SSSR prof.
V.M.Karasik) Leningradskogo pediatricheskogo meditsinskogo instituta.
(RHODANESE) (UNITHOL)

ABRAMOVA, Zh.I., kand. med. nauk; ANICHKOV, S.V., prof.; BELEN'KIY, M.L.,
 prof.; VAL'DMAN, A.V., doktor med. nauk; VEDENEYEVA, Z.I., kand.
 med. nauk; VINOGRADOV, V.M., kand. med. nauk; GERSHANOVICH, M.L.,
 kand. med. nauk; GINETSIISKIY, A.G., prof.; GORBOVITSKIY, S.Ye.,
 prof.; GREBENKINA, M.A., dotsent; GREKH, I.F., dots.; DENISENKO,
 P.P., kand. med. nauk; D'YACHENKO, P.K., kand. med. nauk; ZHESTYANIKOV,
 V.D., kand. med. nauk; ZAUGOL'NIKOV, S.D., prof.; ZEYMAL', E.V., kand.
 med. nauk; ISKAREV, N.A., kand. med. nauk; KARASIK, V.M., prof.;
 KIVMAN, G.Ya., kand. med. nauk; KOZLOV, O.D., kand. med. nauk; KROTOV,
 A.I., doktor veter. nauk; KUDRIN, A.N., doktor med. nauk; LAZAREV, N.V.,
 prof.; LAPIN, I.P., kand. med. nauk; MEL'NIKOVA, V.F., prof.;
 MESHCHERSKAYA, K.A., prof.; MIKHEL'SON, M.Ya., prof.; MOSHKOVSKIY,
 Sh.D., prof.; PADEYSKAYA, Ye.N., kand. med. nauk; PARIBOK, V.P., prof.;
 PERSHIN, G.N., prof.; PLANEL'YES, Kh.Kh., prof.; PONOMAREV, G.A.,
 prof.; POSKALENKO, A.N., kand. med. nauk; MUKHIN, Ye.A., dots.;
 ROZOVSKAYA, Ye.S., dots.; RYBOLOVLEV, R.S., starshiy nauchnyy sotr.;
 SALIYAMON, L.S., kand. med. nauk; SAFRAZBEKYAN, R.R., kand. biol. nauk;
 TIUNOV, L.A., kand. med. nauk; TOMILINA, T.N., dots.; FELISTOVICH,
 G.I., kand. med. nauk; FRUYENTOV, N.K., kand. med. nauk; KHAUNINA,
 R.A., kand. med. nauk; TSYGANOV, S.V., prof.[deceased]; CHERKES, A.I.,
 prof.;

(Continued on next card)

ABRAMOVA, Zh.I.---(continued) Card 2.

CHERNOV, V.A., doktor med. nauk; SHADURSKIY, K.S., prof.;
YAKOVLEV, V.Ya., doktor khim. nauk; MASHKOVSKIY, M.D., red.;
NIKOLAYEVA, M.M., red.; RULEVA, M.S., tekhn. red.; CHUNAYEVA,
Z.V., tekhn. red.

[Manual on pharmacology] Rukovodstvo po farmakologii. Leningrad,
Medgiz. Vol.2. 1961. 503 p. (MIRA 15:1)

1. Deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR (for
Anichkov, Karasik, Cherkes). 2. Chlen-korrespondent Akademii medi-
tsinskikh nauk SSSR (for Belen'kiy, Ginetsinskiy, Moshkovskiy,
Planel'yes).

(PHARMACOLOGY)

LAPIN, I. P.

"Test for Evaluation of the Pharmacological Activity
of Antidepressive Agents."

paper presented at the Second Hungarian Conference on Therapy
and Pharmacological research, Budapest, Hungary, 2-7 Oct 62

Bechterew Psychoneurological Inst., Psychopharmacological
Laboratory, Leningrad.

LAPIN, I.P.

(Leningrad)

Luciani's periods and the analysis of their origin. Pat. fiziol.
i eksp. terap. 6 no.6:82-86 N-D⁶² (MIRA 17:3)

39200

S/246/62/062/002/003/006
1015/1215

AUTHOR: Lapin, I. P., Khaunina, R. A. and Shchelkunov, Ye. L.

TITLE: The adrenalin, noradrenalin and phenamin effects influenced by tofranil

PERIODICAL: Zhurnal nevropatologii i psikiatrii imeni S. S. Korsakova, v. 62, no. 2, 1962, 183-189

TEXT: The present study deals with the effect of tofranil on the central and peripheral adrenergic processes as well as on the central effect of phenamin (benzedrin). The experiments were carried out on cats and rabbits. The methods and techniques are described. In addition, the effect of tofranil on the group toxicity of phenamin was examined on albino male mice. It was found that the sensibilizing effect of tofranil to adrenalin and noradrenalin was not present in rabbits; therefore it was deduced to be an effect specific to certain species. Nor was this effect found in cases where the cocain effect had been successfully applied several times. As far as the central effect of tofranil is concerned, it increased the motor excitatory effect of phenamin. The authors conclude that this fact indicates the adrenergic mechanism of the central effect of tofranil in addition to its central analeptic effect. It was also found that tofranil and phenamin act synergistically. The different effect of small and large doses of tofranil on group toxicity of phenamin was assumed to indicate that the dual (positive and negative) effect of tofranil on adrenergic structures at the periphery was carried out also through the adrenergic synapses of the brain.

Card 1/2

The adrenalin, noradrenalin...

S/246/62/062/002/003/006
1015/1215

ASSOCIATION: Laboratoriya psikhofarmakologii (Nauchnyy rukovoditel' I. P. Lapin) Nauchno-issledovatel'skogo psikhonevrologicheskogo instituta imeni V. M. Bekhtereva, Leningrad. (Laboratory of Psychopharmacology—scientific director I. P. Lapin. Psychoneurologic Research Institute imeni V. M. Bekhterev, Leningrad)

SUBMITTED: July 1, 1961

Card 2/2

KHAUNINA, R.A.; LAPIN, I.P.

Effect of imipramin on the monamine oxidase activity of
the cat brain. Vop. med. khim. 9 no.2:184-188 Mr.-Ap '63.
(MIRA 17:8)

1. Laboratoriya psikhofarmakologii Nauchno-issledovatel'skogo
psikhonevrologicheskogo instituta imeni V.M. Bekhtereva,
Leningrad.

LAPIN, I.P.

Effect of tofranil on the action of hexenal, chloral hydrate
and morphine in mice. Farm. i toks. 26 no.5:564-568 S.G '63.

(MIRA 17:8)

I. laboratoriya psikhofarmakologii (zav. - starshiy nauchnyy
sotrudnik I.P. Lapin) Nauchno-issledovatel'skogo psikhonevro-
logicheskogo instituta imeni V.M. Bekhtereva, Leningrad.

LAPIN, I.P. (Leningrad)

Pharmacological characteristics of tofranil. Zhur. nevr. i
psikh. 63 no.4:613-628 '63. (MIRA 17:2)

LAPIN, I.P.

Comparative pharmacological data on the use of chlorazepin and tofranil in psychiatric practice. Zhur. nevr. i psikh. 64 no.2:281-289 '64. (MIRA 17:5)

1. Laboratoriya psikhofarmakologii (zaveduyushchiy I.P. Lapin) Nauchno-issledovatel'skogo psikhonevrologicheskogo instituta im. V.M. Bekhtereva, Leningrad.

LAPIN, I.P.

Test for evaluation of the pharmacological effect of antidepressants.
Farm. i toks. 27 no.4:498-501 JI-Ag '64.

(MIRA 17:11)

1. Laboratoriya psikhofarmakologii (zav. - kand. med. nauk. I.P.
Lapin) Nauchno-issledovatel'skogo psikhonevrologicheskogo insti-
tuta imeni Bekhtereva, Leningrad.

LAPIN, I.P., kand.med.nauk

Biochemical pharmacology and the use of nonhydrazine antidepressants
in treating diseases of the nervous system. Zhur. VKHO 9 no.4:438-447
'64. (MIRA 17:10)

LAPIN, Konstantin Kirillovich; CHULKOVA, K.P., red.; SHGHERBAKOV,
A.I., tekhn. red.

[Conquerors of the Volga] Pokoriteli Volgi; ocherki. Kuibyshev,
Kuibyshevskoe knizhnoe izd-vo, 1956. .140 p. (MIRA 15:12)
(Volga Hydroelectric Power Station (Lenin))

LAPIH, K.V.

[Sanitary education in villages] Sanitarnoe prosveshchenie na sele,
ocherki. Moskva, Medgiz, 1955. 324 p. (MIRA 8:11)
(SANITATION) (HEALTH EDUCATION)

LAPIN, Konstantin Vladimirovich, kand.med.nauk; SOKOLOV, I.S., red.;
SHTEYNBERG, L.K., tekhred.

[Health education in the mass campaign for cleanliness and
providing for public services] Sanitarnoe prosveshchenie
v massovom dvizhenii za chistotu i blagoustroistvo. Pod red.
I.S.Sokolova. Moskva, 1958. 150 p. (MIRA 12:7)
(Health education)

LAPIN, L. N.
OK

LIST AND INDEX ORDERS

PROCESSES AND PROPERTIES INDEX

Detection of hydrogen peroxide with diphenylcarbazide. Univ. 6, 1. N. Lapin. *Trudy Fizicheskogo Gosudarst. Univ.* 6, 193-5 (1930); cf. C. A. 30, 511. Besides the method described previously, L. recommends another in which diphenylcarbazide is used for detecting H_2O_2 . To the acidified CrO_5 soln. add the liquid under investigation, let the mixt. stand for several min. and add 2 drops of 1% alc. soln. of diphenylcarbazide. The absence of any color points to the presence of H_2O_2 . But since the mixt. of $K_2Cr_2O_7$ with H_2SO_4 changes easily into $Cr_2(SO_4)_3$ under the influence of Fe^{2+} , sulfites, alcs., etc., the reaction must be carried out in the presence of Br, which oxidizes these compds. completely. The color of Br and its ability to oxidize diphenylcarbazide can be avoided by addn. of phenol. Acidify with several drops of dil. H_2SO_4 and add Br water until a stable yellow color characteristic of free Br is obtained. To 2-3 cc. of this liquid add 2 cc. of CrO_5 and after 5-6 min. several drops of diphenol. To the decolorized liquid add 2-3 drops of diphenylcarbazide. No color characteristic of CrO_5 appears in the presence of even 2 γ of H_2O_2 . Smaller amts. of H_2O_2 can be detected by comparing the color with the control liquid to which an equal vol. of water had been added instead of the liquid under investigation. As little as 0.5 γ of H_2O_2 can be detected from the decoloration of the liquid. The presence of alcs., hydrocarbons and proteins does not interfere with the test. Formalin interferes because it forms with diphenylcarbazide condensation products which are insol. in water and alc. The method can be used for the colorimetric detn. of small amts. of H_2O_2 and as a spot test for detecting peroxides.

W. R. Henn

ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION

RECORD NUMBER

RECORD DATE

1ST AND 2ND COLUMNS										3RD AND 4TH COLUMNS									
PROCESSES AND PROPERTIES INDEX																			
<p><i>Lapin, L.N.</i></p> <p>Application of the leuco derivatives of the di- and triphenylmethane dyes for the drop detection of the ferrocyanide ion. <i>L. N. Lapin. Tzedy Uchezhskogo Gosudarst. Univ., Sbornik Rabot Khim. 13, 160-68(1939).</i>—All color tests proposed for the detection of ferricyanides are based on the oxidizing power of Fe(CN)₆. The use of indigo carmine, phenolphthalein and the leuco derivs. of malachite green for this purpose does not insure freedom from errors because other oxidizing agents produce the same effect as does Fe(CN)₆. Derivs. of triaminotriphenylmethane were investigated. Except the leuco forms of Methyl Green and Iodine Green (which can be regarded as related to the diaminotriphenylmethane series) the investigated derivs. of triaminotriphenylmethane are not sufficiently dependable and specific. The reduced sulfo acids of the diaminotriphenylmethane series (in particular the leuco derivs. of the "Color-fast Green 2 Zh") are transformed very easily into the quinoid form under the influence of Fe(CN)₆. However, in this case also the specificity of the reagents is insufficient. The derivs. of diaminophenylmethane (in particular tetramethyldiaminodiphenylmethane) are not oxidized by direct action of the red salt. The transformation into the dye is possible only by induced oxidation by Fe(CN)₆ in the presence of Zn and Hg ions. The reaction induced by Zn salts is specific to a very high degree for Fe(CN)₆, because in the alk. medium no oxidizing agent causes under analogous conditions the transfer of the reagent into the colored form. Besides its specificity tetramethyldiaminodiphenylmethane possesses a high sensitivity, permitting the detection of 0.1 γ of Fe(CN)₆ in weakly acid solns., 0.2 γ in neutral solns. and from 1 to 5 γ in strongly alk. solns. All remaining cations and anions either do not interfere with the test or they cause an insignificant decrease of sensitivity. In the absence of Fe(CN)₆ the test can be used for the drop method of the detection of Fe(CN)₆. Twenty-four references. W. R. Henn</p>																			
ADDITIONAL METALLURGICAL LITERATURE CLASSIFICATION																			
1ST COLUMN 2ND COLUMN 3RD COLUMN 4TH COLUMN 5TH COLUMN 6TH COLUMN 7TH COLUMN 8TH COLUMN 9TH COLUMN 10TH COLUMN 11TH COLUMN 12TH COLUMN 13TH COLUMN 14TH COLUMN 15TH COLUMN 16TH COLUMN 17TH COLUMN 18TH COLUMN 19TH COLUMN 20TH COLUMN																			

COMMON ELEMENTS		COMMON VARIANTS INDEX	
<p><i>ca. LAPIN, L. N.</i></p> <p>The mechanism of color reactions based on the interaction between sterols and aldehydes. L. N. Lapin. <i>Trudy L'zhskogo Gosudarst. Univ., Sbornik Nauch. Kim. 18, 160-81 (1959).</i> The following method was used for the expts. In 1 ml. of the aldehyde soln. in 90% alc. add 1 ml. of cholesterol soln. and 2 ml. of acid mixt. (3 parts of 80% AcOH and 7 parts of H₂SO₄, d. 1.84), shake the mixt. and heat rapidly to boiling (in all cases the concn. of cholesterol was 0.075%). Since the concn. of aldehyde has no effect on the reaction a soln. contg. 1-2 drops or several crystals of the aldehyde in 10-20 ml. of 90% alc. was used. The reaction between sterols and 2-furaldehyde was used for detg. the completeness of the reactions. Addn. of the acid mixt. to the cholesterol soln. contg. an alc. HCHO soln. forms a pink-red ring on the boundary between the 2 liquid layers. On shaking, the whole mixt. becomes pink with a distinct green fluorescence, but the color disappears rapidly and changes into brown-yellow. The velocity of the process increases from heating. No rings characteristic for cholesterol are formed if a soln. of 2-furaldehyde is added. This is explained by the fact that cholesterol combines with the CO of HCHO. Analogous results are obtained from AcH, but the reaction mixt. is colored orange-yellow with an intense green fluorescence. No free cholesterol is detected in the colored liquid. The behavior of chloral hydrate is different: very little change of color is observed after the addn. of the acid mixt. to the soln. of cholesterol contg. chloral hydrate. With 2-furaldehyde a no. of rings is formed. Acrolein and citronellal were the 2 unsatd. fatty aldehydes investigated. The acid mixt. in the presence of cholesterol produces in the cold a pink-yellow color with an intensive green fluorescence. The color darkens on heating. Citronellal reacts analogously to acrolein, but forms with 2-furaldehyde a wide greenish brown ring on shaking the whole liquid turns violet and blue if much 2-furaldehyde is used. This reaction takes place in the absence of cholesterol. BzH produces a pink color with a green fluorescence from the action of the acid mixt. with cholesterol. On heating the mixt. turns brown. 2-Furaldehyde forms no specific rings, i.e., cholesterol reacts completely with BzH. The color of the pigment formed from the reaction of BzH with cholesterol is not intensive, but it increases considerably if HO groups are added to the benzene nucleus. Reaction mixts. obtained in expts. with aromatic aldehydes produce no color rings with fural solns. The mechanism of the appearance of the color is more complex in the reaction of 2-furaldehyde with camphor. It is possible that from the action of concd. H₂SO₄ camphor undergoes an intramol. rearrangement in which the enol formed takes part. The character of the bond of aldehydes with alcs. is more complex. It is possible that the preliminary polymerization of the aldehyde is followed by the condensation of the polymer with alc. Attempts to replace H₂SO₄ with H₃PO₄ (d. 1.71), HPO₃, P₂O₅ and concd. HCl (d. 1.19) were not successful: the reaction mixt. remained colorless from heating the liquid to boiling. Addn. of several drops of concd. H₂SO₄ to the hot liquid contg. H₃PO₄ produced immediately a definite blue color, but it does not occur with HCl. All products of the reaction of cholesterol with aldehydes are extd. with CHCl₃, producing a pink, violet or blue color. Other similar solvents (CCl₄) are indifferent to the colored</p>		<p>10</p>	
<p>ASB-15A METALLURGICAL LITERATURE CLASSIFICATION</p>			

products, since the dihydride, like cholesterol, also produces compds. with aldehydes the presence of the double bond in the sterol mol. is not necessary. Other sterols and phytosterols (except ergosterol) also produce these reactions. As a final result of his investigations L. draws the following conclusions. (1) Sterols (including cholesterol) react with fatty and aromatic aldehydes, producing colored addn. products. (2) The alkoxy group of sterol takes part in the reaction. (3) The color of the compd. obtained depends on the structure of the aldehyde. The HO and MeO groups are the auxochromes of aldehydes of the homocyclic series. For the heterocyclic derivs. the structure of the nucleus plays the predominant role. (4) From the action of various solvents (AcOEt, AcOAm, benzene, toluene, xylene, CCl₄ and CHCl₃) the product of the addn. of cholesterol with aldehydes can be extd. only with CHCl₃, while nearly all other products of the condensation of aldehydes with sterols are insol. in CHCl₃. (5) The most convenient and sensitive aldehyde test for sterols is the application of 2-furaldehyde, followed by the extn. of the formed pigment with CHCl₃.

W. N. Henn

LAPIN, L.N. 14

Ch

Mercurimetric method of determining chloride in weakly mineralized drinking water. L. N. Lapin and V. P. Moroz. *Zavodskaya Lab.* 9, 1247-9 (1940). The most suitable indicators in mercurimetric detns. are diphenylcarbazide and diphenylcarbazone which were introduced into volumetric analysis by Dubský and Trtilék (C. A. 27, 2107). The use of alc. increases the sharpness of coloration at the end of titration to such an extent that it makes it possible to employ 0.0005 N Hg(NO₃)₂. Evap. 25 ml. of the water in a porcelain cup, cool, add 1 ml. of 0.5 N HNO₃, mix with a glass rod, add 20 ml. alc. and a drop of carbazone and add gradually from a microburet enough of 0.01 N Hg(NO₃)₂ to give a definite violet tint. If the alc. is freshly distd., the blank titration should not require more than 0.01 ml. of 0.01 N Hg(NO₃)₂. The method is sufficiently sensitive to be used for detn. of chloride in rain water and in snow. B. Z. Kamich.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND CATEGORIES

3RD AND 4TH CATEGORIES

5TH AND 6TH CATEGORIES

7TH AND 8TH CATEGORIES

9TH AND 10TH CATEGORIES

11TH AND 12TH CATEGORIES

13TH AND 14TH CATEGORIES

15TH AND 16TH CATEGORIES

17TH AND 18TH CATEGORIES

19TH AND 20TH CATEGORIES

21ST AND 22ND CATEGORIES

23RD AND 24TH CATEGORIES

25TH AND 26TH CATEGORIES

27TH AND 28TH CATEGORIES

29TH AND 30TH CATEGORIES

31ST AND 32ND CATEGORIES

33RD AND 34TH CATEGORIES

35TH AND 36TH CATEGORIES

37TH AND 38TH CATEGORIES

39TH AND 40TH CATEGORIES

41ST AND 42ND CATEGORIES

43RD AND 44TH CATEGORIES

45TH AND 46TH CATEGORIES

47TH AND 48TH CATEGORIES

49TH AND 50TH CATEGORIES

51ST AND 52ND CATEGORIES

53RD AND 54TH CATEGORIES

55TH AND 56TH CATEGORIES

57TH AND 58TH CATEGORIES

59TH AND 60TH CATEGORIES

61ST AND 62ND CATEGORIES

63RD AND 64TH CATEGORIES

65TH AND 66TH CATEGORIES

67TH AND 68TH CATEGORIES

69TH AND 70TH CATEGORIES

71ST AND 72ND CATEGORIES

73RD AND 74TH CATEGORIES

75TH AND 76TH CATEGORIES

77TH AND 78TH CATEGORIES

79TH AND 80TH CATEGORIES

81ST AND 82ND CATEGORIES

83RD AND 84TH CATEGORIES

85TH AND 86TH CATEGORIES

87TH AND 88TH CATEGORIES

89TH AND 90TH CATEGORIES

91ST AND 92ND CATEGORIES

93RD AND 94TH CATEGORIES

95TH AND 96TH CATEGORIES

97TH AND 98TH CATEGORIES

99TH AND 100TH CATEGORIES

118

LAPIN, L. N.

Photometric determination of ascorbic acid by oxidation of reduced 2,6-dichlorophenolindophenol. L. N. Lapin and G. E. Vladimirov. *Biokhimiya* 10, 14-24 (1945).

An excess of 2,6-dichlorophenolindophenol is added to utilize the ascorbic acid; the leuco dye base which is thereby formed is stable even in acid soln. An AsO_2H ext. concn. both colored and reduced forms is divided into 2 equal portions. To one part NaNO_2 and HOAc are added. This transforms the reduced colorless forms to the colored. The amt. of leuco base is detd. by comparing the treated with the untreated sample in the Pulfrich photometer.

H. Priestley

Chair Biochemistry, Samarkand Med. Inst.

438-514 METALLURGICAL LITERATURE CLASSIFICATION

LAPIN, L. N.

U S S R

794. Photometric method for the micro-determination of copper in soil. 1. N. Lapin and V. P. Makarova (*Pekhotovskiy, Khimicheskiy Zhurnal*, 1953, Abstr. No. 22,138).—The method is based on the reaction of Cu with diphenylcarbazone (II). *Procedure*—Organic matter in a sample of finely ground soil (500 mg) is destroyed by heating first with a mixture of conc. H_2SO_4 (3 ml) and H_2SO_4 (2 g) and then with 1 ml of 30 per cent. aq. H_2O_2 . Aqueous NH_3 (sp. gr. 0.92) is added to the residue until the soln. is neutral to phenolphthalein; after the addition of a 2-ml excess, the soln. is made up to 50 ml with water. To 10 ml of the clear supernatant liquid, 0.5 ml of an ammoniacal soln. of phenolphthalein (10 mg of phenolphthalein, 1 ml of conc. aq. NH_3 , and 9 ml of water) are added and then dil. H_2SO_4 (1 + 4), dropwise, to give a pale-rose colour. Crystalline KH_2PO_4 (0.5 g) is added to make the pH 4 to 5 and the vol. is made up to 15 ml. Five ml of a soln. of I (10 mg of I dissolved by heating on the water-bath in 30 to 40 ml of benzene is cooled and made up to 100 ml; the addition of 0.4 ml of freshly distilled pyridine ensures more rapid and complete development of the complex) are added. The colour of the benzene soln. is measured in a step-photometer. The complex has max. at 528 m μ and the extinction obeys Beer's law. The complex contains \approx 12 per cent. of Cu, is insoluble in H_2O , slightly soluble in pentanol, ether and CCl_4 , and soluble in benzene and its homologues. The error does not exceed 0.7 per cent. E. HAYES

Lapin, L.N.

✓ 2043. Theoretical basis of the thymol-hypobromite reaction for ammonia. L. N. Lapin. *Trudy Komissii Anal. Khim. Akad. Nauk, SSSR*, 1954, 5 (8), 77-85; *Ref. Zhur., Khim.*, 1955, Abstr. *Chem*

No. 28,479.—The reaction for ammonia based on the development of an intense blue colour on the addition to soln. of ammonium salts of phenol and hypobromite takes place in three stages. The first, most specific and characteristic, phase is the formation of *p*-aminophenol; the second is the conversion of *p*-aminophenol into a halogen derivative of quinonimine; and the third is the synthesis of indophenol. With thymol in place of phenol the indophenol formed passes into the organic solvent and widens the range of application of the reaction. Detection is not masked by the formation of a ppt. Most organic and inorganic compounds, except certain primary amines, do not interfere. *Procedure*—To 5 ml of the soln. to be tested in a large test-tube is added 1 ml of 25 per cent. thymol in ether, the mixture is shaken and 12 to 15 ml of hypobromite (1 vol. of 2 N NaOH and 2 vol. of saturated bromine water) are added in small portions. After several min., 5 ml of ether or 3 ml of xylene are added and the colour is transferred to the organic solvent. By means of this method 0.01 mg of NH_3 can be detected in 100 ml of soln. Ammonia in biological material can be detected without preliminary treatment.

G. S. SMITH

LAPIN, L.N.

Mercurimetric method of determination of chlorides in water. L. N. Lapin and R. Kh. Zaimanov (T. P. Pavlov, Med. Inst. Samar'ansk). Gigiena i Sanit. 1954, No. 10, 16-19. A simple method is described for detg. chlorides in an aq. medium. The method is based on a procedure described earlier (C.A. 35, 3018⁹) in which a mercurimetric detn. of Cl ion is made. The method is accurate within 0.01-0.05% (large error in soln. with about 2.8 mg./l. Cl). The necessary 0.1N Hg(NO₃)₂ is prepd. by dissolving 10.0 g. HgO, moistened with H₂O, in 14-20 ml. concd. HNO₃ (d. 1.4) and dilg. to 1 l. The soln. is standardized against 0.01N KCl by treating a 10-ml. portion of the KCl soln. with 20 ml. 0.05% BiOH, 2 drops 1% diphenylcarbazone indicator, acidification with 2-3 drops N HNO₃, and titration with Hg(NO₃)₂ to pink-violet color. For low mineral content of waters, it is suggested that 0.01N Hg(NO₃)₂ be used. Cyanides, chromates, and thiocyanates interfere. G. M. Karolapoff.

LAPIN, L. N.

U S S R

Mercurimetric method for microdetermination of the chlorine ion in soils. L. N. Lapin and R. Kh. Zamanov (A. Navoiy Uzbek State Univ.). *Pochvenovedenie* 1954, No. 11, 80-4. —Reagents necessary for this method are: 0.1N $\text{Hg}(\text{NO}_3)_2$ (for soils highly salinized); 0.01N $\text{Hg}(\text{NO}_3)_2$ (for slightly saline soils); 1% alc. soln. of diphenylcarbazone; approx. N HNO_3 . To 5 ml. of a 1:5 soil water ext. 10 ml. of 99% alc. is added; then 2 drops of diphenylcarbazone is added followed by the addn., drop by drop, of some HNO_3 until the color disappears. The soln. is then titrated with either $\text{Hg}(\text{NO}_3)_2$ soln., depending on the quantity of Cl in the ext., until a light violet-pink color appears. A microburet assembly is described and illustrated which speeds up the procedure. J. S. Joffe

LAPIN, L. N.

Mercurimetric method for the determination of chlorides in blood. L. N. Lapin (Med. Inst., Samarkand). *Bio. khim. 19*, 1948, 40, 1948. — The method is based on the fact that in the titration of chlorides in alc. medium diphenylcarbazide and diphenylcarbazone in the presence of a low titer soln. of $Hg(NO_3)_2$ undergo a clear-cut color change, a 0.001N soln. of the nitrate being sufficient for practical work. Under such conditions the mercurimetric titration of chlorides exceeds by far the sensitivity of iodometric and is equal to the best nephelometric methods. The titration of alc. filtrates of blood, freed from protein with a 1% soln. of $CdSO_4$ and a 0.1N soln. of NaOH, yields highly accurate results; the exptl. error varying between 0.5 and 1%. The prepn. of the required reagents and details of the analytical procedure are adequately described. B. S. Levine

Lapin, L. N.

6000

✓ Mercurimetric method for determining halides in organic compounds. L. N. Lapin and R. Kh. Zamanov. J. Anal. Chem. U.S.S.R. 10, 353-7 (1955) (Engl. translation).—See C.A. 50, 7665k. R. M. R.

Chem
R. M. R.

LAPIN, L. N.

4

✓ 2111. Mercurimetric method of determining halides in organic compounds. L. N. Lapin and R. Kh. Zamanov (U. P. Pavlov ~~Scientific Inst.~~). Zhur. Anal. Khim., 1955, 10 (6), 384-387.—The organic compound is decomposed by Na and a 15 per cent. soln. of ethanediol in isobutyl alcohol (modified Stepanov method), and the halide is determined by titration with 0.05 N Hg(NO₃)₂ in the presence of diphenylcarbazone as indicator. G. S. SMITH

Chun

PM

LAPIN, L.N.

Method for the microdetermination of antimony in the urine and blood
of patients with kala-azar treated by solusurmine; Vop.med. khim.
2 no.4:309-315 J1-Ag '56. (MLRA 9:10)

1. Kafedra biokhimii Samarkandskogo meditsinskogo instituta imeni
I.P.Pavlova.

(ANATOMY, determination,
in blood & urine in visceral leishmaniasis ther. with
antimony cpds. (Rus))

(LEISHMANIASIS, VISCERAL, therapy,
antimony cpds., microdeterm. of blood & urine antimony
in(Rus))

Lapin, L.N.

G-1

USSR/ Analytical Chemistry - General Questions

Abs Jour : Referat Zhur - Khimiya, No4, 1957, 11982

Author : Lapin L.N., Geyn V.O.

Inst : Commission on Analytical Chemistry of the Academy of Sciences USSR

Title : Use of Basic Dyes of Diamino-Triphenylmethane Series for the Detection of Minute Amounts of Antimony, Gold and Thallium

Orig Pub : Tr. Komis. po analit. khimii. AN SSSR, 1956, 7(10), 217-222

Abstract : To decrease the effect of excess HCl and NaNO₂ on sensitivity of detection of Sb as SbCl₆⁻ by means of dyes of di- and triphenylmethane series, it is recommended to dissolve the resulting compound in organic solvents. Compound of Crystal Violet with SbCl₆⁻ ion passes readily into benzene and its homologues, imparting to them a blue-violet coloration. On using derivatives of diamino-triphenylmethane (Malachite Green and Brilliant Green) more reliable results are obtained. To 1 ml of the solution under study,

Card 1/2

LAPIN, I.N.; ZAMANOV, R.Kh.; MAKAROVA, V.P.

Colorimetric method for detrainning ammonia in soil with the aid
of the thymol-hypobromite reaction [with summary in English].
Pochvovedenie no.4:95-98 Ap '57. (MIRA 10:7)

1. Uzbekskiy gosudarstvennyy universitet, Biologo-pochvennyy
fakul'tet, G. Samarkand.
(Soils--Analysis) (Ammonia) (Colorimetry)

LAPIN, L.N.; PRIYEV, I.G.

Copper content of food products, canned food and cooked dishes
[With summary in English]. Vop.pit. 16 no.1:62-65 Ja-Y '57.

(MIRA 10:3)

1. Iz kafedry biokhimi (zaveduyushchiy - professor L.N.Lapin)
Samarkandskogo meditsinskogo institutua imeni akademika I.P.
Pavlova.

(COPPER, determ.

in raw, canned & cooked food (Rus))

(FOOD

copper content of raw, canned & cooked food (Rus))

LAPIN, L. IV.

LAPIN, L. H.

Using diphenylcarbazone for photometric microdetermination of copper in the blood, urine and tissues [with summary in English]. Biokhimiia 22 no.5:825-829 S-O '57. (MIRA 11:1)

1. Kafedra biokhimiia Samarkandskogo meditsinskogo instituta.
(CARBASON, related compounds,
diphenylcarbazone, in photometric determ. of copper
metab. (Rus))
(COPPER, determination,
photometric with diphenylcarbazone (Rus))

AUTHORS: Lapin, L. N., Reys, N. V. SOV/75-13-4-8/29

TITLE: Application of Diphenyl Carbazone in the Photometric Determination of Copper in Iron and Steel (Primeneniye difenilkarbazona dlya fotometricheskogo opredeleniya medi v zheleze i stali)

PERIODICAL: Zhurnal analiticheskoy khimii, 1958, Vol. 13, Nr 4, pp. 426-429 (USSR)

ABSTRACT: In recent years, a number of photometric methods were suggested for the determination of copper in iron and steel (Refs 1-9), many of them, however, require special apparatus and reagents difficult to obtain. The authors found that the extremely sensitive reaction of copper with diphenyl carbazone under formation of a complex of low solubility in water is considerably more suited as compared with the methods of micro-determinations of copper described in publications. The formation of the complex is highly dependent on the pH-value. The best conditions are to be found about a pH of 4-5. The copper complex of diphenyl carbazone is not soluble in water and only difficultly soluble in ethanol, ether and carbon tetrachloride, whereas it is well soluble in benzene and its homologs. The red-colored solutions of the complex in benzene obey the law

Card 1/3

SOV/75-13-4-8/29

Application of Diphenyl Carbazone in the Photometric Determination of Copper in Iron and Steel

of Lambert - Beer. Hence, they can be determined by quantitative photometric methods. Under the conditions of analysis diphenyl carbazone with the following cations does not form compounds soluble in benzene: Ag^+ , AuCl_4^- , Zn^{2+} , Al^{3+} , Sn^{2+} , $\text{V}_2\text{O}_7^{4-}$, Sb^{3+} , Bi^{3+} , WO_4^{2-} , UO_2^{2+} , F^- , Mn^{2+} , Fe^{2+} , Fe^{3+} , Co^{2+} , Ni^{2+} , Cr^{3+} , PtCl_6^{2-} , $\text{B}_4\text{O}_7^{2-}$, Ti^{4+} , Tl^+ . Diphenyl carbazone

reacts with mercury only in the presence of chlorides, whereas with copper, molybdenum, cadmium and lead it reacts only at very high concentrations of these elements. The reaction is very sensitive and permits the photometric proof of $0,1\mu\text{g}$ of copper. In the quantitative determination of copper in steels and iron according to this method, the iron is kept in solution in a complex state by a surplus of primary sodium phosphate and ammonia. The error of determination does not exceed 4%. As this reaction is extremely sensitive, the apparatus has to be kept carefully clear of possible copper traces. The preparation of the initial solutions and the exact way of carrying out the determination of copper in iron and steels according to this method is described in detail, as well as the results of the

Card 2/3

Application of Diphenyl Carbazone in the Photometric Determination of Copper
in Iron and Steel

SOV/75-13-4-8/29

determination of copper in different kinds of steel and iron.
There are 2 figures, 2 tables, and 12 references, 9 of which
are Soviet.

ASSOCIATION: Samarkandskiy meditsinskiy institut (Samarkand Medical
Institute)

SUBMITTED: June 25, 1956

1. Copper--Determination 2. Diphenyl carbazones--Applications
3. Iron--Analysis 4. Steel--Analysis 5. Photometry
--Equipment

Card 3/3

LAPIN, L.N.; PRIYEV, I.G. (Samarkand)

Use of diphenylcarbazone in colorimetric microdetermination of copper in food products and in cooked food [with summary in English]. Vopr.pit. 17 no.1:68-72 Ja-F '58. (MIRA 11:4)

1. Iz kafedry biologicheskoy khimii (zav. - prof. L.N.Lapin)
Samarkandskogo meditsinskogo instituta imeni akad. I.P.Pavlova.

(COPPER, determination,
in food, colorimetric micromethod with diphenylcarbazone
(Rus))

(FOOD,
copper, colorimetric microdeterm. with diphenylcarbazone
(Rus))

LAPIN, L.N.

Simplified method for determining the potassium iodide in table salt by means of a new iodine reaction. Izv. AN Uz.SSR. Ser.med. no.6:60-65 '59. (MIRA 13:4)

1. Samarkandskiy gosudarstvennyy meditsinskiy institut.
(POTASSIUM IODIDE) (SALT)

LAPIN, L.N.

Detection of the complex ions I_3^- , I_2Cl^- , I_2Br^- , Br_3^- with the aid of brilliant green. Trudy kom. anal. khim. 11:323-327 '60.

(MIRA 13:10)

1. Samarkandskiy meditsinskiy institut im. akad. I.P.Pavlova.
(Complex ions) (Brilliant green)

LAPIN, L.N., prof.; REYS, N.V., dotsent

Determination of potassium iodide in table salt by means of a
reaction between the complex ion I_2Cl^- and brilliant.green. Gig i san.
25 no.4:66-71 Ap '60. (MIRA 13:8)

1. Iz kafedry biologicheskoy khimii Samarkandskogo meditsinskogo
instituta imeni akad. I.P. Pavlova.
(SODIUM CHLORIDE) (POTASSIUM IODIDE)

LAPIN° L.N.; IOFFE-GOLUBCHIK, G.I.; PRIYEV, I.G.

The use of trace elements in functional uterine hemorrhages.
Akush.i gin. 36 no.1:91-95 Ja-P '60. (MIRA 13:10)
(HEMORRHAGE, UTERINE)

LAPIN, I.N., prof.

Detection of iodine based on the conversion of I⁻ into compound
polyhalide ions I₃⁻ and I₂B⁻ forming saltlike compounds
with Brilliant Green. Nauch. trudy SamMI 21:166-172 '62.

(MIRA 17:5)

1. Iz kafedry biokhimi Samarkandskogo meditsinskogo instituta
imeni Pavlova.

LAPIN, L. Yu

BOLDYREV, G.P.; VOGMAN, D.A.; NOVOKHATSKIY, I.P.; VERK, D.L.; DYUGAYEV, I.V.; KAVUN, V.M.; KURENKO, A.A.; UZBEKOV, M.R.; ARSEN'YEV, S.Ya.; YEGORKIN, A.N.; KORSKOV, P.F.; KUZ'MIN, V.H.; STRELETS, B.A.; PATKOVSKIY, A.B.; BOLES LAVSKAYA, B.M.; INDENBOM, D.B.; FINKEL'SHTEYN, A.S.; SHAPIRO, I.S.; LAPIN, L.Yu.. Prinimali uchastiye: NEVSKAYA, G.I.; FEDOSEYEV, V.A.; KASPILOVSKIY, Ya.B., ZERNOVA, K.V.. BARDIN, I.P., akademik, otv.red.; SATPAYEV, K.I., akademik, nauchnyy red.; STRUMILIN, akademik, nauchnyy red.; ANTIPOV, M.I., nauchnyy red.; BELYANCHIKOV, K.P., nauchnyy red.; YEROFEYEV, B.N., nauchnyy red.; KALGANOV, M.I., nauchnyy red.; SAMARIN, A.M., nauchnyy red.; SLEDZYUK, P.Ye., nauchnyy red.; KHLIBNIKOV, V.B., nauchnyy red.; STREYS, N.A., nauchnyy red.; BANKVITSER, A.L., red.izd-va; POLYAKOVA, T.V., tekhn.red.

[Iron ore deposits in central Kazakhstan and ways for their utilization] Zhelezorudnye mestorozhdenia TSentral'nogo Kazakhstana i puti ikh ispol'zovaniia. Otvetstvennyi red. I.P.Bardin. Moskva, 1960. 556 p. (MIRA 13:4)

1. Akademiya nauk SSSR. Mezhdunarodstvennaya postoyannaya komissiya po zhelezu. 2. Gosudarstvennyy institut po proyektirovaniyu gorn'kh predpriyatiy zhelezorudnoy i margantsevoy promyshlennosti i promyshlennosti nemetallicheskiykh iskopayemykh (Giproruda) (for Boldyrev, Vogman, Arsen'yev, Yegorkin, Korsekov, Kuz'min, Strelets, (Continued on next card)

BOLDYREV, G.P.--(continued). Card 2.

3. Institut geologicheskikh nauk AN Kazakhskoy SSR (for Novokhatskiy).
 4. Tsentral'no-Kazakhstanskoye geologicheskoye upravleniye Ministerstva geologii i okhrany neдр SSSR (for Verk, Dyugayev, Kavun, Kurenko, Uzbekov).
 5. Nauchno-issledovatel'skiy institut mekhanicheskoy obrabotki poleznykh iskopayemykh (Mikhanobr) (for Patkovskiy).
 6. Gosudarstvennyy institut proyektirovaniya metallurg.zavodov (Giprometz) (for Boleslavskaya, Indenbom, Finkel'shteyn, Nevskaya, Fedoseyev, Karpilovskiy).
 7. Mezhdunarodnaya postoyannaya komissiya po zhelezu AN SSSR (for Shapiro, Zernova, Kalganov).
 8. Gosplan SSSR (for Lapin).
- (Kazakhstan--Iron ores)

MAYZEL'S, David L'vovich. Prinimali uchastiye: LAPIN, L.Yu., inzh.;
LAZAREV, S.V., inzh.; YAKOVLEV, N.I., red.

[Organization, planning and financing of capital construction in the ferrous metal industry] Organizatsiia, planirovanie i finansirovanie kapital'nogo stroitel'stva v chernoi metallurgii. Moskva, Metallurgii, 1965. 325 p.
(MIRA 18:10)

KHOZHAINOV, I.I.; LAPIN, M.D.

Preoperative preparation and treatment of patients with gastric and duodenal peptic ulcer. Sov.med. 23 no.11:119-123 N '59.

(MIRA 13:3)

1. Iz kafedry fakul'tetskoy khirurgii (zaveduyushchiy - dotsent I.I. Khozhainov) Stavropol'skogo meditsinskogo instituta.
(PEPTIC ULCER surgery)

BEREZOV, Yu.Ye.; STEPANYAN, Ye.P.; IAPIN, M.D.

Postoperative thrombi and thromboembolism in patients with cancer
of the cardia and esophagus. Grud. khir. 2 no.6:91-99 N-D '60.
(MIRA 14:1)

1. Iz otdeleniya zabolevaniy pishchevoda (zav. - doktor meditsinskikh
nauk Yu.Ye.Berezov) i biokhimicheskoy laboratorii (zav. - doktor
biologicheskikh nauk Ye.P.Stepanyan) Instituta grudnoy khirurgii
(dir. - prof. S.A.Kolesnikov, nauchnyy rukovoditel' - akademik
A.N. Bakulev) AMN SSSR. Adres avtorov; Moskva, Leninskiy prospekt,
d. 8, Institut grudnoy khirurgii AMN SSSR.

(ALIMENTARY CANAL--CANCER)

(EMBOLISM)

(ANTICOAGULANTS (MEDICINE))

BEREZOV, Yu.Ye.; LAPIN, M.D.

State of various factors of blood coagulation in patients with
cancer of the cardia and esophagus. Eksper.khir. 5 no. 3:33-39
My-Je '60. (MIRA 14:1)

(STOMACH—CANCER) (ESOPHAGUS—CANCER)
(BLOOD—COAGULATION)

KHOZHAINOV, I.I., dotsent (Stavropol' na Kavkaze, ul.Morozova, d.1,kv.8);
BULYNIN, I.I.; LAPIN, M.D.

Treatment of endarteritis obliterans by subcutaneous administration
of novocaine and blood transfusions. Nov. khir. arkh. no.4:79-81 J1-
Ag '60. (MIRA 15:2)

1. Kafedra fakul'tetskoy khirurgii (zav. - dotsent I.I.Khoshainov)
Stavropol'skogo meditsinskogo instituta.
(ARTERIES__DISEASES) (INJECTIONS, HYPODERMIC)
(BLOOD__TRANSFUSION) (NOVOCAINE)

LAPIN, M. D.

Cand Med Sci - (diss) "Dynamics of whole protein and protein fractions in blood plasma in patients with cancer of the cardiac section of the stomach and esophagus in the process of surgical treatment." Moscow, 1961. 17 pp; (Academy of Medical Sciences USSR); 250 copies; price not given; (KL, 10-61 sup, 225)

LAPIN, M.D. (Moskva, 1-y Baltiyskiy per., d.3/25, kv.38)

Electrophoretic characteristics of blood protein fractions
in cancer of the cardia and esophagus. Grud. khir. 2 no.4:
94-102 JI-Ag '60. (MIRA 15:6)

1. Iz khirurgicheskogo otdeleniya zabolevaniy pishchevoda
(zav. - doktor meditsinskikh nauk Yu.Ye. Perezov) i biokhimicheskoy
laboratorii (zav. - doktor biologicheskikh nauk Ye.P. Stepanyan)
Instituta grudnoy khirurgii AMN SSSR (dir. - prof. S.A. Kolesnikov,
nauchnyy rukovoditel' - akademik A.N. Bakulev).

(BLOOD PROTEINS)

(ESOPHAGUS--CANCER)

(STOMACH--CANCER)

(ELECTROPHORESIS)

BEREZOV, Yu.Ye.; LAPIN, M.D.

Changes in the protein fractions of the blood serum in cancer of the cardia and esophagus determined by electrophoresis during surgical interventions. Grud. khir. 3 no.1:81-89 Ja-F '61.

(MIRA 16:5)

1. Iz otdeleniya zabolevaniy pishchevoda (zav. - doktor med.nauk Yu.Ye.Berésov) i biokhimicheskoy laboratorii (zav. - doktor biolog. nauk Ye.P.Stepanyan) Instituta grudnoy khirurgii (dir. - prof. S.A.Kolesnikov, nauchnyy rukovoditel'-akademik A.N.Bakulev) AMN SSSR. Adres avtorov: Moskva, Leninskiy prospekt, 8, Institut grudnoy khirurgii AMN SSSR.

(ELECTROPHORESIS) (ESOPHAGUS—CANCER) (BLOOD PROTEINS)

LAPIN, M.D.

Total proteins and protein fractions of the blood serum and the nature of their changes under the influence of pre-operative preparation in patients with cancer of the cardiac section of the stomach and esophagus. Grud.khir. 4. no.6: 83-88 N-D'62. (MIRA 16:10)

1. Iz otdeleniya zabolevaniy pishchevoda (zav. - doktor med. nauk Yu.Ye.Berezov) i biokhimicheskoy laboratorii (zav. prof. Ye.P.Stepanyan) Instituta grudnoy khirurgii (dir.-prof. S.A.Kolesnikov, nauchnyy rukovoditel' - akademik A.N. Bakulev) AMN SSSR. Adres avtora: Moskva, V-49, Leninskiy prospekt, d.8, Institut serdechno-sosudistoy khirurgii AMN SSSR.

(BLOOD PROTEINS) (STOMACH--CANCER)
(ESOPHAGUS--CANCER)

ISAKHANOV, P.M.; LAPIN, M.D.

Some blood coagulation factors in cancer of the stomach and esophagus. Khirurgia 39 no.8:88-92 Ag '63. (MIRA 17:6)

1. Iz Instituta serdechno-sosudistoy khirurgii (direktor - prof. S.A. Kolesnikov; nauchnyy rukovoditel' - akad. A.N. Bakulev) AMN SSSR i Moskovskogo oblastnogo onkologicheskogo dispansera (glavnyy vrach P.M. Isakhanov). Nauchnyy rukovoditel' raboty - prof. YuYe. Berezov.

BEREZOV, Yu.Ye.; STEPANYAN, Ye.P.; LAPIN, M.D.

Effect of thrombogenic processes and anticoagulation therapy
on the protein fractions of the blood serum in cancer of the
cardial region of the stomach and esophagus. Zhur.eksp.i klin.med.
4 no.5:45-52 '64. (MIRA 18:11)

1. Institut gradnoy khirurgii AMN SSSR.

LAPIN, M.I.

49-3-16/16

AUTHORS: Belokopytov, M.M., Devitsin, V.M. and Lapin, M.I.

TITLE: All Union Inter-Departmental Conference on aerial photography. (Vsesoyuznoye mezhdovedomstvennoye soveshchaniye po aeros"emke).

PERIODICAL: "Izvestiya Akademii Nauk, Seriya Geofizicheskaya" (Bulletin of the Ac.Sc., Geophysics Series), 1957, No.3, pp.415-416 (U.S.S.R.)

ABSTRACT: This conference was convened by the Aerial Methods Laboratory, Ac.Sc., U.S.S.R. (Laboratoriya Aerometodov Akademii Nauk SSSR) and was held between November 25 and December 1, 1956 in Leningrad. Numerous organisations of the Ac.Sc., Ministries and Departments participated. Ninety papers were discussed, twenty of which related to aerogeophysics. There were plenary meetings and sectional meetings on a number of subjects. The papers on aerial photography and aerophotogrammetry were presented at the plenary meetings, these included the following:
"Aerogeophysical methods and the position relating to improving their effectiveness in geological sounding and prospecting work" by A. A. Logachev (LGI); "Tentative plan for aeromagnetic prospecting and geological prospecting work between 1956 and 1960 and further improvement and development of the aeromagnetic method" by V.Ye.Nikitskiy

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49-3-16/16

All Union Inter-Departmental Conference on aerial photography.(Cont.)

(Glavgeofizika); "Present state and further development of aerogeophysical methods in the oil industry" by V. L. Sokolov (VNIIGeofizika). V.Ye. Nikitskiy and V. L. Sokolov stated that at present about 12 000 000 km² have been dealt with by aeromagnetic methods and during the present Five Year Plan period aeromagnetic mapping of the entire mainland of the U.S.S.R. at a scale of 1:1 000 000 will be completed and the mapping at scales of 1:200 000, 1:100 000, 1:50 000 and 1:25 000 will be continued. In accordance with the programme of the International Geophysical Year aeromagnetic mapping at a scale of 1:2 500 000 will be carried out of the Okhotsk Sea and for doing this work it is scheduled to increase the number of available aeromagnetometers to sixty in 1960 and to improve their design. Series manufacture of the aeromagnetometer A3-13 will begin in 1958; it will be supplemented with a variational station and calculating (computer?) apparatus for evaluating the magnetograms. Series production by 1960 is scheduled of nuclear resonance aeromagnetometers with a zero point of 0.1 γ /hr and an accuracy of $\pm 1\gamma$ and of a magneto aerogradient meter.

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49-3-16/16

All Union Inter-Departmental Conference on aerial photography. (Cont.)

Much attention was paid to field aeromagnetic techniques. V. M. Rymanov (VNII Geofizika), N. D. Palitsyn (Laboratory of Aerial Methods, Ac.Sc., U.S.S.R.), P. S. Cherepanov (VNII Geofizika), S. V. Knorozov (Directorate of Aerial Photography GUGVF), Ya. G. Vorob'ev (Western Geophysical Trust), V. L. Sokolov and others have emphasized that the visual method of surveying is highly inaccurate and unsatisfactory owing to large longitudinal as well as transverse deflections of the aircraft from a given course and owing to the practical impossibility of verifying the accuracy of plotting the location of the aircraft by the navigator. Visual surveying is particularly unsatisfactory where landmarks are scarce (deserts, sea) and application of radio geodesy is necessary in these cases. According to V. L. Sokolov, VNII Geofizika is working at present on introducing radio geodesy. V. Ye. Nikitskiy stated that Glavgeofizika and Glavneftegeofizika proposed introduction in 1957 of aerial photo-surveying. G. V. Romanovskiy (NII VTS SA), P. S. Cherepanov, V. D. Sokolov and others proposed supplementing topographical maps, particularly in sparsely inhabited regions, with photographic plans in

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49-3-16/16

All Union Inter-Departmental Conference on aerial photography. (Cont.)

isometric projection and particular importance was attached to photographic plans (maps) of the winter landscape. S. V. Knorozov, M. D. Konshin (TsNIIGAIK) and others mentioned that existing aeronavigational instruments and altitude meters do not satisfy requirements to be met by such instruments. Some of the speakers (P. A. Kukin - VNIIGeofizika, O. N. Solov'ev, Ya. G. Vorob'ev) dealt with the problem of surveying aeromagnetic observations. The role of large scale ground and aerial mapping was also discussed. V. Ye. Nikitskiy reported that Glavgeofizika proposes to develop during the next two to three years a method of aeromagnetic mapping at scales of 1:50 000 and 1:25 000. According to V. Ye. Nikitskiy, VSEGEI (with the participation of NIIZMIR and Glavgeofizika) will work out in 1957 unified technical specifications for compiling and publishing magnetic maps at scales of 1:1 000 000 and 1:200 000 and a technique of utilisation of aeromagnetic data in compiling and preparing for publication of geological maps. Geological maps at these scales are to be accompanied by appropriate maps of the magnetic field.

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49-3-16/16

All Union Inter-Departmental Conference on aerial photography. (Cont.)

V. P. Orlov demonstrated maps of the T and T_a fields of a scale of 1:2 500 000 compiled by NIIZMIR on the basis of data of absolute measurements and of relative aeromagnetic measurements up to and including 1954.

In numerous papers the problem was discussed of the state and further development of techniques of interpretation of aeromagnetic observations. A. A. Logachev and other speakers emphasized the important achievements of Soviet scientists in this field. Logachev considers as the most promising those methods of quantitative interpretation of magnetic anomalies which are based on utilising the higher derivatives of the potential. Logachev and Nikitskiy evaluated the average accuracy of calculation of depths at 15 to 20% but numerous other speakers doubted whether this high accuracy is really achieved.

V. Ye. Nikitskiy, Ya. G. Vorob'ev, O. N. Solov'ev, P. A. Kukin and others elucidated the problems of the geological structure of various regions according to aeromagnetic prospecting data. Much attention was paid to the use of aerial methods for other types of geophysical

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49-3-16/16

All Union Inter-Departmental Conference on aerial photography. (Cont.)

prospecting: radio prospecting, gravimetric prospecting, electric prospecting, seismic prospecting. Except for magnetometric measurements, apparatus for measurement from aircraft is available only for radiometric measurements. In other methods aircraft are used only for transportation or delivery of the metering apparatus from one point of observation to another but even this has resulted in considerable economy and improved productivity of labour. Aerial methods proved very useful in line and point seismic sounding and in studying telluric currents. In 1956 VNIIGeofizika developed a method of field gravimetrical measurement for scales of 1:1 000 000 and 1:200 000 using helicopters. Aerial methods are particularly effective in regions with difficult access. Therefore, it is planned to use during the sixth Five Year Plan period aerial seismic and aerial electric prospecting in Western Siberia. Application of aerial methods necessitated the design of portable apparatus. Seismic prospecting and electric prospecting stations "CC-24 Shvedchikov" and "VNIIGeofizika" have been tested with very good results and the question has been raised of constructing gravimetric and electric

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49-3-16/16

All Union Inter-Departmental Conference on aerial photography. (Cont.)

prospecting instruments for measuring during flight (V. L. Sokolov). N. D. Palitsyn, G.S. Smirnov (VIRG), A. N. Krasnov (VIRG), N. V. Kobets (Aerial Methods Laboratory Ac.Sc., U.S.S.R.) and Ye. E. Popova (Western Geophysical Trust) pointed out the necessity of using combined aerial methods. The task was assigned to VSEGEI of developing in 1957 techniques of combined geophysical investigations. In their papers, A. A. Logachev, V. L. Sokolov, S. V. Knorozov and others raised the question of organisation of aeromagnetic work and the economic effectiveness of such work. A resolution was adopted relating to the further development of aerial methods. Particularly, it was decided to create at the Aerial Methods Laboratory, Ac.Sc. an Inter-Departmental Commission for coordinating the scientific and practical activity of the individual establishments and to organise a photogrammetric society and a publication, to extend lecturing on aerial methods in teaching establishments, to adopt measures for more rapid introduction of radio-geodetic methods of evaluating aeromagnetic observations, to create a unified network covering the entire Soviet

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49-3-16/16

All Union Inter-Departmental Conference on aerial
photography. (Cont.)

Union for aeromagnetic surveying, etc.

(This is a complete translation and not an abstract).

AVAILABLE: Library of Congress

Card 8/8

LAPIN, Mark Mikhaylovich, professor; KONYUSHKOV, Nikolay Stepanovich, kandidat sel'skokhozyaystvennykh nauk; BARAYEV, Nikolay Feoktistovich; SUKORTSEVA, Klavdiya Dmitriyevna, kandidat sel'skokhozyaystvennykh nauk; TRUYEVTSOVA, M.F., redaktor; RYBIN, I.V., tekhnicheskiy redaktor

[Principles of cultivation practices; a manual for students in agricultural schools] Osnovy agrotekhniki; posobie dlia uchashchikhsia sel'skoi shkoly. Pod obshchei red. M.M.Lapina. Moskva, Gos. uchebno-pedagog. izd-vo Ministerstva prosveshchenia RSFSR. Pt.2. [Plant growing] Rasteniyevodstvo. 1956. 318 p. (MLRA 10:1)
(Agriculture)

LAPIN, Mark Mikhailovich, professor; TRUYEVSEVA, M.F., redaktor;
SMIRNOVA, M.I., tekhnicheskii redaktor

[Principles of plant growing; textbook for eight-grade students
in rural schools] Osnovy rastenievodstva; uchebnoe posobie dlia
uchashchikhsia VIII klassa sel'skikh shkol. Moskva, Gos. uchebno-
pedagog. izd-vo M-va prosv. RSFSR, 1957. 255 p. (MLRA 10:10)
(Field crops)

LAPIN, Mark Mikhaylovich, professor; KAPLAN, G.D., redaktor; BAILLOD, A.I.,
tekhnicheskiiy redaktor

[Plant growing, with the principles of breeding and seed growing]
Rastenievodstvo s osnovami selektsii i semenovodstva. Izd. 3-e,
dop. i perer. Moskva, Gos. izd-vo selkhoz. lit-ry, 1956. 559 p.
(Plant breeding) (MIRA 10:1)

LAPIN, M.N.

Opredelenie optimal'nogo perednego ugla rezhushchikh tverdospлавnykh instrumentov pri skorostnom rezanii metallov.

Vestn. Mash., 1950, no. 2. p. 41-49

Determination of the angle of cutting edge of hard alloy tools during high-speed steel instruments.

DLC: TN4.V4

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.

L 17973-65 EWT(1)/EWA(b) Pa-4 AMD JK

ACCESSION NR: AP5002644

S/0016/64/000/010/0141/0142

AUTHOR: Denisov, K. A.; Lapin, N. N.

TITLE: Epidemiological characteristics of coksackie virus transmission

SOURCE: Zhurnal mikrobiologii, epidemiologii i immunobiologii, no.10, 1964,
141-142

TOPIC TAGS: virus disease, serum, immunology, disease control

ABSTRACT: The article describes an outbreak of Goksackie fever in Donetskaya oblast. Droplet infection was predominant. In the absence of a specific vaccine for active prophylaxis, gamma-globulin should be used as an effective means of passive prophylaxis.

ASSOCIATION: Donetskij meditsinskiy institut (Donets Medical Institute)

SUBMITTED: 24Dec63

ENCL: 00

SUB CODE: 15, GO

NO REF SOV: 000

OTHER: 000

JPRS

Card 1/1

KOLOSNIHENKO, I.N., mashinist-instruktor; LAPIN, N.A., starshiy mashinist

What is suggested by operational experience with the 8^r series of
electric units. Elek. 1 tepl. tiaga 2 no.4:33-36 Ap '58
(MIRA 12:3)

(Electric railroads)

LAPIN, N.A., mashinist

Concerning some faults of electric trains. Elek.1 tepl.tiaga 7
no.2:39-40 F '63. (MIRA 16:2)

1. Depo Moskva II.

(Electric railroads)

ELECTROCHEMICAL COLORING OF METAL OBJECTS

A. Zytner
and N. Lapin. *Novosti Tekh.* 1939, No. 20-1, 38; *Khim.
Referat. Zhur.* 1939, No. 12, 77.—A method for coloring
metal objects by plating on their surfaces a film of Cu₂O
from alk. solns. of org. Cu compds. is described. Various
colors can be given to the objects (from violet to yellow,
the color depending on the thickness of the film). The
compn. of the bath is CuSO₄, 60 g./l., refined sugar 90 g./l.
and NaOH 45 g./l. The sp. gr. at 16° is 1.10, the temp.
of the electrolyte 25–40° and the anodes are of pure Cu.
The expts. were performed with a c. d. of 0.01 amp./sq.
dm.

W. R. Henn

LAPIN, N.H.

LAPIN, N.A. ; KATSNEL'SON, V. Yu.

[Rapid machining of steel during removal of a large cut] Skoro-
stnoe techenie stali pri sniatii struzhki krupnogo sechenia.
Moskva, Gos. nauchno-tekhn. izd-vo mashinostroitel'noi lit-ry,
1952. 92 p. (MIRA 8:10)

(Steel) (Metal cutting)

LAPIN, N.A., KATSNEL'SON, V.Yu.; BALANDIN, A.F., inzhener, redaktor;
UVAROVA, A.F., tekhnicheskiiy redaktor

[Curling of shavings according to the innovator A.I.Merkulov's
method] Struzhkozavivanie po metodu novatora A.I.Merkulova. Mo-
skva, Gos. nauchno-tekhn. izd-vo mashinostroitel'noi lit-ry, 1955.
28 p. (MIRA 8:7)

(Metal cutting)

LAPIN, N.A., inzh.; LOZHECHNIKOV, Ye.B., inzh.

Standard types of multiple-bucket loaders. Stroi. i dor. mashinostr.
3 no.9:13-15 S '58. (MIRA 11:10)

(Road machinery)

LAPIN, N.A.

PLANT I BOOK EXPLOITATION SCT/ASOL

Moscow. "Izvestiya" nauchno-issledovatel'skogo instituta tekhnologii i mashinostroyeniya. Razrabotka i proizvodstvo tekhnologii i mashinostroyeniya, chasti 2. Osnovnye razrabotki i konstruirovaniye mashinostroyeniya (osnovnye razrabotki i konstruirovaniye mashinostroyeniya i konstruirovaniye mashinostroyeniya). Moscow, Mashizdat, 1960. 172 p. (Series: 1000 [Tech] No. 99) 2,500 copies printed.

Sponsoring Agencies: Gosudarstvennyy nauchno-issledovatel'skiy institut tekhnologii i mashinostroyeniya. Centralnyy nauchno-issledovatel'skiy institut tekhnologii i mashinostroyeniya.

Ed. by: G.P. Zhukov, Doctor of Technical Sciences, Professor, Managing Ed. for the Institute on Heavy Machine Building, S.Ye. Golovin, Engineer, Ed. of Publishing House: G.Ye. Sobolev, Tech. Ed. 1. Zh. Chernov.

PREFACE: This book is intended for technical personnel in heavy-machine plants and for scientific workers in factory laboratories and research institutes.

Card 1/1

CONTENTS: The book contains a summary of work conducted by the personnel of the Institute in the field of mechanical, machine and quality control of parts. Included is a discussion on the correct construction of parts, feed and speed in cutting with maximum capacity of the machine tool. Also considered are the development of cutting tools in rough and finishing production, and the application of ultrasonic devices for flaw detection and measurement of wall thickness. No preface is mentioned. References follow some of the chapters.

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AVAILABLE: Library of Congress

DUDNIK, P.S., inzhener; LAPIN, N.G.

The problem of good molding quality in concrete mixes. Stroi.prom. 32
no.5:40-43 My '54. (MLRA 7:6)
(Concrete)

SOV/130-59-2-6/17

AUTHOR: Lapin, N.L.

TITLE: Use of Oxygen in Bottom Repairs and the Increase in
Bottom Life (Primeneniye kislороda pri remontakh poda
i povysheniye stoykosti podin)

PERIODICAL: Metallurg, 1959, Nr 2, pp 16-18 (USSR)

ABSTRACT: The open-hearth furnaces in the first block of Nr 1
melting shop at the Nizhne-Tagil'skiy Metallurgical
Combine have bottoms 78 and 81.4 m² in area. The
bottoms are made up of 650 mm magnesite under a
220 mm burned-on layer. The roofs are of periclase-spinellide
brick and the furnaces are fired with mixed blast-
furnace coke-oven gas with the addition, during melting
down and finishing, of coal tar or anthracite oil.
All the furnaces operate with oxygen-enrichment of the
flame and two have provision for oxygen-lancing of the
bath. The practice is scrap-ore with up to 70% hot
metal. In the first half of 1958 average bottom life
and duration of repairs were 33.1 heats and 2 hr 50 min
respectively, compared with the 1955 values of 16.3 and
7 hr 26 min. After giving this general information the

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SOV/130-59-2-6/17

Use of Oxygen in Bottom Repairs and the Increase in Bottom Life

author goes on to give details of repair practice. The preparatory period in which the tapping hole is deepened to allow complete removal of residual metal and slag and hose connections are made takes 20 to 25 minutes, during which the finishing-period firing rate is continued. Oxygen at 7 to 8 atm gauge is blown through heat-resisting steel nozzles to remove residual metal and slag with as little splashing over the bottom as possible. This phase, in which the furnace is not fired, takes 25 to 30 minutes. Pure magnesite powder is then projected for 25 to 30 minutes on to the bottom with the aid of a fettling machine and a special deflector (Fig 2), to form a layer 120 to 200 mm deep and the bottom is then carefully levelled. During the addition of the powder the firing rate is 12 to 15 million k cals per hour and this is raised to 30 to 32 million for 50 to 60 min to heat the layer. Mill-scale (50-60% of the magnesite powder) is added from charging-boxes for slagging the layer. The author notes the importance of rapid preparation of the bottom for repairing and the great advantage of oxygen over air

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SOV/130-59-2-6/17

Use of Oxygen in Bottom Repairs and the Increase in Bottom Life

in this respect. No roof spalling has occurred. The superiority in rapidity and durability of the single-layer over the double-layer repair method is shown (table) by comparative results. The author concludes that with the layer thickness recommended, fusion to the full depth during the repair period is not required. He states that the thick-layer method was successfully applied to a new bottom on a 140 tonne furnace. There are 2 figures and 1 table.

Card 3/3

ROMENETS, V.A.; MAKAYEV, S.V.; LAPIN, N.L.

Studying indices of the rotary furnace process. Izv.vys.ucheb.zav.;
chern.met. 4 no.9:191-197 '61. (MIRA 14:10)

1. Moskovskiy institut stali.
(Rotary hearth furnaces)

ROMENETS, V.A.; LAPIN, N.L.; MAKAYEV, S.V.

Evaluating the technical and economic indices of the rotary
hearth process. Izv. vys. ucheb. zav.; Chern. met. 4 no.11:
193-198 '61. (MIRA 14:12)

1. Moskovskiy institut stali.
(Rotary hearth furnaces)

LAPIN, N.N.; SLYUSAREV, A.T.; YEFIMENKO, A.G.

Direct photometric determination of copper in high alloys. Zav.lab.
29 no.7:807 '63. (MIRA 16:8)

1. Zhdanovskiy metallurgicheskiy institut.
(Copper alloys--Analysis)

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Determination of alumina in (Magnitogorsk) iron ores by electrolysis with mercury cathode. N. N. Lajin and V. S. Temyanko. *Zavodskaya Lab.* 6, 751 (1957). Dissolve a 0.5-g. sample in 25 cc. HCl with addn. of 2.3 cc. HNO₃, evap. partially, add 40-50 cc. H₂O and filter. Decomp. the SiO₂ with Na₂CO₃-K₂CO₃, dissolve the melt, filter and unite the 2 filtrates. To remove the excess Ca⁺⁺, Mg⁺⁺ and carbonates, treat the soln. with excess NH₄OH, filter and dissolve the Al(OH)₃ and Fe(OH)₃ in a little 10% H₂SO₄ (100 cc. of the soln. should contain 0.3-0.5 cc. H₂SO₄). Sep. the Fe on the Hg. anode in the Cain cell at 6-7 v. and 3.5-4 amp., and det. Al in the electrolyte as usual. Chas. Blanc

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

CA

A silver sulfide method for the determination of cadmium. N. S. Lapid (*Magnitogorsk Metallurgical Inst.*). *Zashchita* [25, 17, 159-60 (1946)]. - Dissolve 7.712 g. of Cd(NO₃)₂ in a 500-ml. measuring flask, place 20 ml. of the soln. in each of 4 flasks, add to each flask 80 ml. of water and 5 ml. of concd. HCl, pass H₂S, wash the ppt. until no reactions for Cl⁻ and S²⁻ are obtained, and det. volumetrically 2 of these samples with 0.007 N AgNO₃, KCNS (10 g./l.), and Fe alum (10 g. per 100 ml. of water contg. HNO₃). By a sep. titration det. the conversion coeff. between AgNO₃ and KCNS (25 ml. of AgNO₃ is equiv. to 18.5 ml. of KCNS), $F_{\text{KCNS}/\text{AgNO}_3} = 25/18.5 = 1.35$. Transfer the 2 washed ppts. to be used for volumetric analysis together with filters into conic flasks with stoppers, add 30 ml. of standardized AgNO₃ soln. to each flask, shake until the ppt. and filter are broken up (3-5 min.), wash the stoppers, heat the soln. for approx. 5 min., filter the black ppt. formed with the filter, wash 3 to 4 times with water, add 2 ml. of Fe alum and 2 ml. of concd. HNO₃ to the filtrate, and titrate with KCNS until a persistent faintly pink color is obtained. Back-titration requires 0.5-0.6 ml. of KCNS. The vol. of AgNO₃ soln. taking place in the reaction is detd. by the equation $V = V_1 - V_2F$ (V is the vol. of AgNO₃ used for the reaction with CdS, V_1 the vol. of AgNO₃ soln. used, V_2 the vol. of KCNS soln. used for back-titration, F the conversion factor detd. by a sep. titration). Results of detns. obtained in 2 samples contg. 0.1120 g./ml. of Cd by the gravimetric and by the volumetric method were, resp., 0.1080 and 0.1140 g./ml. in 1 sample, and 0.1100 and 0.1140 g./ml. in the 2nd sample. The time required for the volumetric method was only one half that for the gravimetric method. Four references.

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W. R. Henn

ATA-ILA METALLURGICAL L